

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2005/011000

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C08G63/08 C08G63/688 C08G63/685 C08G63/91

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C08G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<b>SAULNIER B., PONSART S., COUDANE J., GARREAU H. &amp; VERT M.: "Lactic acid-based functionalized polymers via copolymerization and chemical modification"</b> <b>MACROMOLECULAR BIOSCIENCE,</b> <b>vol. 4, no. 3, 2004, pages 232-237,</b> <b>XP002339168</b> <b>cited in the application</b> <b>pages 235-236; figures 3,4</b> <b>-----</b> <b>US 5 610 241 A (LEE ET AL)</b> <b>11 March 1997 (1997-03-11)</b> <b>column 8, line 1 - line 24</b> <b>-----</b> <b>-/-</b>	3-5,7
A		7,8

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

Date of mailing of the International search report

4 August 2005

16/08/2005

Name and mailing address of the ISA

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PCT/JP2005/011000

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 265 247 A (LENZ ET AL) 5 May 1981 (1981-05-05) cited in the application column 1, line 51 - column 3, line 2; claims -----	1-8
A	FR 2 765 228 A (CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS) 31 December 1998 (1998-12-31) page 2, line 17 - page 3, line 5; claims page 3, line 30 - page 4, line 14 -----	1-8
A	HIRONOBU FUKUZAKI ET AL: "SYNTHESIS OF BIODEGRADABLE COPOLY(L-LACTIC ACID/AROMATIC HYDROXYACIDS) WITH RELATIVELY LOW MOLECULAR WEIGHT" EUROPEAN POLYMER JOURNAL, PERGAMON PRESS LTD. OXFORD, GB, vol. 26, no. 12, January 1990 (1990-01), pages 1273-1277, XP000205044 ISSN: 0014-3057 the whole document -----	1-8
A	WHITESELL J K ET AL: "Homochiral and Heterochiral Polyesters: Polymers Derived from Mandelic Acid" CHEMISTRY OF MATERIALS, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 2, 1990, pages 248-254, XP002167703 ISSN: 0897-4756 the whole document -----	1-8
A	CAMMAS S., BÉAR M-M., MOINE L., ESCALUP R., PONCHEL G., KATAKO A K., GUÉRIN P.: "Polymers of malic acid and 3-alkylmalic acid as synthetic PHAs in the design of biocompatible hydrolyzable devices" INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol. 25, 1999, pages 273-282, XP002339169 cited in the application the whole document -----	5
A	PONSART S., COUDANE J., VERT M.: "A novel route to poly( <i>e</i> -caprolactone)-based copolymers via anionic derivatization" BIOMACROMOLECULES, vol. 1, 2000, pages 275-281, XP002339170 tables 1,3 -----	7
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	YIN M. & BAKER G.L.: "Preparation and Characterization of substituted polylactides" MACROMOLECULES, vol. 32, no. 23, 1999, pages 7711-7717, XP002339171 scheme 1 -----	1-8
A	YAMAKOA T., HOTTA Y., KOBAYASHI K., KIMURA Y.: "Synthesis and properties of malic acid-containing functional polymers" INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol. 25, 1999, pages 265-271, XP002339172 cited in the application the whole document -----	1-8

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2005/011000

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5610241	A	11-03-1997	EP WO	0898590 A1 9742249 A1		03-03-1999 13-11-1997
US 4265247	A	05-05-1981	US	4320753 A		23-03-1982
FR 2765228	A	31-12-1998	FR CA EP WO JP US	2765228 A1 2295952 A1 0991692 A1 9900441 A1 2002511113 T 6156429 A		31-12-1998 07-01-1999 12-04-2000 07-01-1999 09-04-2002 05-12-2000